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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,069	12/18/2001	Ned M. Smith	884.627US1	8363
21186	7590	07/27/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402-0938			TO, JENNIFER N	
			ART UNIT	PAPER NUMBER
			2195	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/025,069

Applicant(s)

SMITH, NED M.

Examiner

Jennifer N. To

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-25 are presenting for examination.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 1-10 are directed to method steps in which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alia, (specifying, binding, configuring, scheduling, executing, identifying, defining, locating, searching, and registration) can be practiced mentally in conjunction with pen and paper that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Therefore, the claimed invention is directed to non-statutory subject matter. The claims should be amended to indicate a computer implements the subject matter. (i.e. a computer implemented method).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al. (U.S. Patent No.6308163) (hereafter Du 163), in view of Du et al. (U.S. Patent No. 5826239) (hereafter Du 239).

6. As per claim 1, Du 163 teaches the invention substantially as claimed including a method comprising:

specifying a process definition task structure including a plurality of tasks (col. 1, lines 21-26; col. 3, lines 9-13);

dynamically binding a plurality of selected resources to the plurality of tasks (col. 4, lines 33-44; col. 5, lines 28-43);

scheduling the plurality of resources to execute the plurality of tasks (figs. 1 & 7);  
and

executing the plurality of tasks (fig. 1 & 7).

Du 163 did not specifically teach configuring a cache to store at least one process information element included in the plurality of tasks and at least one datum having a value.

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7. However, Du 239 teaches that configuring a cache for storing process information element included in the plurality of tasks and at least one datum having a value (col. 10, lines 14-22).

8. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Du 163 and Du 239 because Du 239 teaching of configuring a cache for storing process information element included in the plurality of tasks and at least one datum having a value would improve the integrity of Du 163 by providing a faster access.

9. As per claim 2, Du 163 teaches that wherein dynamically binding a plurality of selected resources to the plurality of tasks further comprises:

identifying a plurality of intrinsic properties associated with a plurality of designated resources (col. 4, lines 40-42; col. 10, lines 33-36);

identifying a plurality of assignable properties associated with the plurality of designated resources (col. 4, lines 42-43; col. 10, lines 36-38); and

defining a plurality of query predicates associated with the plurality of designated resources (col. 5, lines 28-30; col. 8, lines 44-49).

10. As per claim 3, Du 163 teaches that wherein dynamically binding a plurality of selected resources to the plurality of tasks further comprises:

registration of the pluralities of intrinsic and assignable properties with at least one resource directory (col. 7, lines 30-36);

locating a plurality of resource directories including the at least one resource directory (col. 9, lines 17-26); and

searching the plurality of resource directories to find the plurality of selected resources associated with the plurality of designated resources (col. 10, lines 41-60).

11. As per claim 4, Du 239 teaches:

configuring a plurality of access control rules associated with the plurality of selected resources (fig. 5; col. 10, lines 43-46); and

delivering a plurality of access credentials associated with the plurality of access control rules to the plurality of selected resources (col. 19, lines 19-26).

12. As per claim 5, Du 239 teaches:

distributing at least one software module to at least one of the plurality of selected resources (col. 3, lines 39-55; col. 20, lines 18-20); and

distributing the plurality of tasks to the plurality of selected resources (col. 3, lines 39-55; col. 20, lines 20-22 ).

13. As per claim 6, Du 239 teaches:

pre-fetching the value of the at least one datum (col. 19, lines 4-6); and

storing the value of the at least one datum in the cache (col. 22, lines 60-61).

14. As per claim 7, Du 239 further teaches revising the value of the datum stored in the cache (col. 20, lines 61-62).

15. As per claim 8, Du 239 teaches:

requesting the value of the datum from a data source (col. 4, lines 57-59);

marking the datum at the data source using a tag associated with a selected one of the plurality of tasks stored in the cache (col. 16, lines 13-18);

receiving an update notification for the value of the datum (col. 16, lines 20-24);

and

replacing the value of the datum with an updated value for the datum (col. 20, lines 61-62).

16. As per claim 9, Du 239 further teaches removing the tag when the selected one of the plurality of tasks is purged from the cache (col. 12, lines 47-56).

17. As per claim 10, Du 239 further teaches monitoring a plurality of results associated with executing the plurality of tasks (fig. 2, items 24a-24c).

18. As per claim 11, these are an information system claims that correspond to the method claim 1. Therefore, this claim is rejected for the same reason as claims 1.

19. As per claim 12, Du 239 further teaches that the cache update module capable of being communicatively coupled to the cache (figs. 2 & 8 & 9).

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20. As per claim 13, this is an information system claim that corresponds to the method claim 10. Therefore, this claim is rejected for the same reason as claim 10.

21. As per claim 14, Du 239 teaches the specification module and the scheduling module are included in a first computer (fig. 2).

22. As per claim 15, Du 239 teaches the binding module and the cache are included in a second computer capable of being communicatively coupled to the first computer (fig. 2).

23. As per claims 16-20, these are an article claims that correspond to the method claims 1-3, 7, and 8. Therefore, this claim is rejected for the same reason as claims 1-3, 7, and 8 above.

24. As per claims 21, Du 163 teaches specifying a process body including a plurality of tasks (col. 1, lines 20-26).

Du 239 teaches specifying a process state having execution state information (fig. 2; col. 20, lines 8-10).

25. As per claim 22, Du 163 teaches specifying at least one operation conducted at a resource discovery location by a selected resource having a resource profile (col. 9, lines 24-31).



26. As per claims 23, Du 163 teaches specifying a service type, an interface definition, and parameter data (col. 9, lines 57-67).

27. As per claims 24, Du 163 teaches specifying a datum to be revised at a data discovery location by a selected repository having a repository profile (col. 20, lines 61-62).

28. As per claim 25, Du 239 teaches specifying a process instance identification, a process execution status, and at least one task result associated with a selected one of the plurality of tasks (fig. 2; col. 7, lines 59-67; col. 8, lines 1-9).

### ***Response to Arguments***

29. Applicant's arguments filed 06/10/2005 with respect to claims 1-25 under 35 USC 103 (a) rejections have been considered but are moot in view of the new ground(s) of rejection.

30. Applicant's arguments filed 06/10/2005 with respect to claims 1-10 under USC 101 rejections have been fully considered but they are not persuasive. In the remarks Applicant argued (1) "configuring a cache clearly is not a task that can be accomplished mentally in conjunction with pen and paper".

31. Examiner respectfully traverses Applicant's remarks:

As to point (1), configuring a cache is a task that can be accomplished mentally in conjunction with pen and paper. According to Chebrolu (U.S. Patent No. 6868445), software can be configured as a cache (col. 2, lines 22-25). Software is a combination of codes in which can be written in a piece of paper.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 7AM- 4:30 PM, F 7AM- 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer N To  
Examiner  
Art Unit 2195

  
MAJID BANANKHAH  
PRIMARY EXAMINER